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ABSTRACT

After reviewing the current movement toward job enrichment, a system was designed for the technical services department of the Mercer County Community College Library. The Library Work Order Processing System, as tried between January and March, 1974, was designed to permit each worker more variety of jobs. The technical services department was divided into three levels: a librarian, a technical assistant, and three clerk typists. Under the new system, all jobs in the department were divided into small units so that a library assistant could finish a unit in a few hours or a day. Each unit carried a written work order with a detailed job instruction issued by the librarian, and each unit was to be finished by one person. The workers responsibility and a sense of the importance of the assigned work because they knew that their evaluation or promotion would be based on these work records. The three month experiment with the system was evaluated in three aspects: production statistics; absenteeism; and workers' job attitudes as measured in personal interviews. The results were considered outstanding on all three measures, and permanent implementation of the system was recommended. (Author/SL)

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THE LIBRARY WORK ORDER PROCESSING SYSTEM: A NEW APPROACH TO MOTIVATE EMPLOYEES AND TO INCREASE PRODUCTION IN THE TECHNICAL SERVICE DEPARTMENT OF MERCER COUNTY COMMUNITY COLLEGE LIBRARY

APPLIED EDUCATIONAL RESEARCH AND EVALUATION

by

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ABSTRACT

A job enrichment system for the Technical Processing Department of Mercer County Community College Library is designed. Each worker's daily work is restructured to make the job more interesting and challenging. It is called Library Work Order Processing System. The system is based on a work order method used by many business and industrial organizations.

INTRODUCTION

Motivating employees and less-cost-more-production have been the basic management goals in many profit-making organizations. As library organizations become larger and the cost of labor goes higher, motivating employees and less-cost-more-production become the major management goals in library operations.

There are two major functional structures in a library. One is public service and the other is technical service, which includes ordering and preparation. Since public service requires personal contact mostly on a one-to-one basis, supervisors, reference librarians, desk attendants, secretaries, etc., are not discussed in this paper; mainly, because the nature of their work does not lend itself to a production-analysis approach as does work in the technical service department. Therefore, the above mentioned management goals are best applied in the technical service area, where a large number of people work from 9 to 5, often in congested circumstances.

Usually, more than one-half of the library staff works in the technical service department. Technical processing work consists of endless amounts of typing and routine paper work. Just like factory jobs, the tasks are boring and tiresome. Workers are poorly motivated and frustrated. As a result, production is slow and the worker's idle times are frequent. Serious job dissatisfaction is on the rise among clerical workers in library technical service department. Why the discontent? Is it the pay? Working conditions? Or is it the very nature of the work that is itself chiefly responsible?

The answer is that workers actually do not hate the work: they hate the way we set up the work.[1]

The purpose of this paper is to design a job enrichment program which will motivate employees and increase production in the technical service department of the Mercer County Community College Library.

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[1]William R. Whikehart, "Let's Stop Turning Workers Into Human Machines," Plain Truth, XXXVII (November, 1972), p. 13

BACKGROUND AND SIGNIFICANCE

Although the motivation to work is only one among many of human motivations, the professional literature about work motivation alone is stupendous. As early as 500 B.C., Confucius said, "Make your work interesting, your day will be bright."[2] The best known Indian religious leader, founder of Buddhism, Gautema Buddha, appraised working man highly. There are also many passages about incentives to work in the Bible.

The early practitioners of American management tackled the problem very simply. They concentrated on the mechanical aspects of the job and left the workers out of it. The first sustained effort in this direction was made by Frederick W. Taylor in the 1800's.[3] He put it this way: "The ideal of efficiency in industry is to simplify the work to such a degree that it can be done by a trained gorilla."[4]

Even if it were possible to achieve Taylor's ideal, it is doubtful whether as much efficiency as he visualized would result. On highly automated operations it is still possible for

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[2]Choongsik, Kim, The Great Confucius (Seoul, Korea: Yang Chung Press, 1958), p. 7

[3]James O. Rice, Job Enthusiasm and Employee Morale (New York: Funk & Wagnalls Co., 1965), p. 2

[4]Quoted by Stuart Chase in Men and Machines (New York: Macmillan Co., 1930), p. 158

workers to slow down when they feel so inclined.

As the average worker's education has increased, expectations have grown infinitely greater. A recent nationwide Department of Labor survey suggests that what working Americans now want most from their jobs is that they be in some way interesting.[5]

With this in mind, many companies have begun implementing a number of work innovations designed to make routine jobs more challenging and interesting. However, the job enrichment effort is not new. The suggestion box was one of this kind. The earliest incident of the suggestion box idea used was at the Leven Ship Yard, Dumbarton, Scotland in 1800, and there is evidence that a similar system was introduced during the same year in the factory of the Yale and Towne Manufacturing Company at Stamford, Connecticut.[6] Along with its advantages as a direct channel of communication, the suggestion box provides many mutual benefits to management and workers. On the other hand, suggestion systems frequently fail for a variety of reasons. Those most commonly cited are that top management tends not to give enough support to the plan, rewards are generally too low when compared to the benefits gained by the organization, the

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[5]Boredom on the Assembly-Line: Factories Contend with a New Industrial Revolution," Life, September 1, 1972, p. 38

[6]F. A. Denz, Ideas from Employees (New York, Funk & Wagnalls Co., 1948), p. 2

process time is too long, and the plan itself is insufficiently and inconsistently promoted.[7]

In 1954, Peter F. Drucker introduced form to the concept of "Management by Objectives" (MBO) in his book, The Practice of Management.[8] Since then, MBO has become one of the major management as well as motivation tools in many private, public, and educational organizations.[9]

However, it should be noted that when MBO is applied at lower organizational levels, employees do not always want to be involved in their own goal setting.[10] In this instance, MBO serves simply to increase pressure on the individual rather than motivate them to do the job they want to do.

One of the largest job enrichment programs in recent years was at American Telephone and Telegraph Company. Malcolm Gillette, Director of the Human Resources Program for the company, stated: "We believe you can't change a worker's attitude

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[7]William S. Wilcox, "Can Suggestion Systems Pay for Themselves?" Management Record XIV (March, 1952), 85-87

[8]Peter F. Drucker, The Practice of Management (New York: Harper & Row), 1954, pp. 1-59

[9]Winston Oberg, "Make Performance Appraisal Relevant." Harvard Business Review, L (January-February, 1972), 15

[10]Oberg, op. cit., p. 16

on a boring job unless you change what he does."[11] One of the best examples of such restructuring, he pointed out, involved girls working on telephone directories. Gillette explained:

> Before the program, each of 30 girls rotated on 21 separate jobs involved in producing the directories. So what we did is that instead of doing just one task, we gave each girl the responsibility of doing one book apiece. Each girl was to do all the jobs on that particular book.....compilations, alphabetizing, arrangements with the press, etc. So now when asked "what do you do at work?' instead of replying, 'I work on phone books,' each girl could reply 'I am a directory clerk. I produce the direction itself.'[12]

Gillette concluded that the results of the program were very encouraging; absenteeism and turnover dropped to zero while job satisfaction and productivity increased.[13]

A number of other companies, including Saab, which has teams building entire engines, and Volvo, which built a new plant designed so one worker team can assemble large sections of a car from beginning to end, have employed similar restructuring with the same results.[14]

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[11]Quoted by William R. Whitehart in "Let's Stop Turning Workers Into Human Machines," Plain Truth, op. cit., p. 16

[12]Ibid.

[13]Ibid.

[14]"Boring on the Assembly-Line," op. cit., p. 38

There is no reason why library organizations cannot implement a similar job enrichment program which has proved successful in other industries.

PROCEDURES

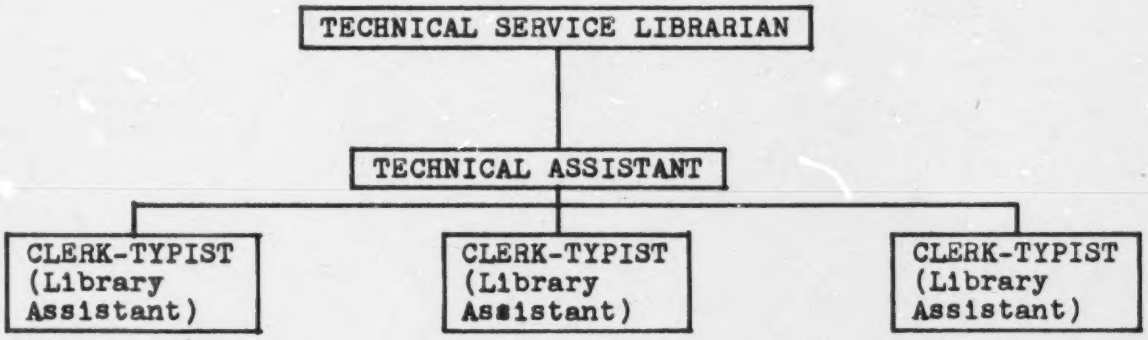
After reviewing the current movement in the field of job enrichment, a system was designed for the technical service department of the Mercer County Community College Library. This is named "Library Work Order Processing System," and used for three months in the technical service department. The results were analyzed.

A. Library Work Order Processing System

To permit each worker more variety of jobs, the technical service department of Mercer County Community College was divided into three levels; a technical service librarian, a technical assistant, and three clerk-typists. This 1 : 1 : 3 might be an ideal ratio of technical service librarian to technical service assistant to clerk-typists. However, the number of the clerk-typists might be also dependent upon the supervisory capacity and work load of the cataloger.

Figure 1

Organizational Chart of the Technical Service Department of the Mercer County Community College



On the first level, the technical service librarian is a professional librarian with a master's degree in library science. He should do jobs which need professional knowledge or decision: he is the head of the department. He should act as an independent agent to utilize his maximum potential as a professional, and he must have sufficient authority to make certain decisions.

On the second level, the technical assistant is a para-professional with an associate degree in library science or a bachelor's degree in other subject or outstanding library experience as a clerk-typist. He is the most knowledgeable or experienced person among non-professional workers. He should be able to teach and supervise clerk-typists.

On the third level, the clerk-typists are a main work force. Usually, a high school diploma is the only requirement

for employment on this level, however, the clerk-typists carry out all of the manual tasks; jobs such as keypunching computer cards, typing, labeling, receiving new items, book mending, filing cards, and so on. The library clerk-typist is not the same as the clerk-typist working in some other office for secretarial reasons. Beyond the required skill to be a clerk-typist, he should have some knowledge and understanding about the library operation. The job requires more technical knowledge. Therefore, the pay should be correlated with a distinct title. So I call them "Library Assistants."

The Library Work Order Processing System works in this way: all jobs in the technical services department are divided into small units so that a library assistant can finish a unit in a few hours or at the most in a day. If the circumstance is permitted, the work unit should be included from the beginning to the end. Each unit carries a written work order with a detailed job instruction issued by the cataloger or other librarians, and each work unit must be finished by one assigned person. A unit may be a bundle of newspspers or periodicals, ready to be accessioned, which is usually put in a tray. Another unit may be twenty-five cataloged books put on a booktruck to be processed, including typing cards, making labels, and filing the cards. A third unit may be five damaged art books marked "urgent" from the circulation department to be repaired right away.

The technical assistant can also make work orders for those jobs which do not require librarian's touches. He is responsible for assigning the right job to the right library assistant. No one will perform a task without a written work order in the technical service department. In case of an emergency, a verbal order may be given but written work orders should be filled out later for work performance records. When the library assistant finishes his assigned job, he will not have anything on his desk until another work order is received.

What the written work order means to workers is responsibility and a sense of importance of the assigned work because they know that their evaluation, or promotion will be based on these work records.

One typical feature of this system is that all library assistants do not need a fixed and detailed job description. This is what gives freshness and variety of job experience to the workers.

One may need at least a work order form in this system. It can be used for every job unit issued by an appropriate person. (see a sample form in the Appendix)

The work order form is divided into seven sections, and these sections are used the following ways:

1. Requested by_____Date_____Write the name of the person who makes work request and requesting date.

2. Priority.....Check either routine or urgent depending upon the nature of the work.

3. Describe Work in Detail.....To be written by the work requester. The work instruction should be in detail.

4. Approved by____Date_____ To be filled out by Supervisor. This step may be skipped.

Work Assigned to .....Worker's name should be written in by supervisor.

Date & Time Started.....The actual starting time should be recorded here by assigned worker.

Date & Time Finished.....The actual finished time should be recorded here by the worker.

Total Time Spent.....The total working hours should be tabulated and recorded here by the worker.

5. Supervised & Inspected by _____Date_____

should be filled out by supervisor or one who revised the job.

6. Description & Cost..... Can be filled out Head of Technical Service Department, if needed.

7. Comment or Suggestion, if any.....Can be written any comment or suggestion by either worker or supervisor for future improvement.

Since this system may involve a great deal of paper work, it is wise to spend as little time as possible in handling these forms. Workers should not spend more than ten minutes on their work order forms in a day. The job items written on the form should be in clear and short language. For these jobs done on a periodic basis, the shortest of descriptions, or even a coding system in the manner of the physician's statement, can be used.

In many cases, the full name is not required. Initials or first name is sufficient for identification purposes.

B. Evaluation

The Library Work Order Processing System was used in the Technical Service Department of the Mercer County Community College Library from January 2, 1974 to March 30, 1974 for the period of three months to test its reliability and validity. After the experiment period, the results were evaluated by Robert Jones, Technical Service Librarian, and the writer of this paper, in the following three aspects: production statistics, absenteeism, and worker's job attitudes.

Production statistics were compiled at the end of each month. The three months' production statistics from January to March were compared with the previous three months in the following table:

Table 1
Production Statistics

By format / year month	73 Oct	73 Nov	73 Dec	Sub total	74 Jan	74 Feb	74 Mar	Sub total	± rate
Books	199	195	187	581	325	310	395	1030	+56%
Non-prints	22	33	20	75	35	41	39	115	+65%
Total	221	228	207	656	360	351	434	1145	+57%

During the same period, the number of absenteeism and turnover were counted and compared with the previous three months in the following table:

Table 2
Absenteeism and Turnover

By format / year month	73 Oct	73 Nov	73 Dec	Sub-total	74 Jan	74 Feb	74 Mar	Sub-total
No. of workers	5	5	5	5	5	5	5	5
Days absent	5	4	6	15	1	0	0	1

Finally, to check worker's new job attitudes, personal interviews were conducted in the first week of April, 1974. All involved workers were interviewed by the writer of this paper.

FINDINGS AND RESULTS

The work order processing method was designed and tested in Mercer County Community College Library Technical Service Department from January to March, 1974. The results were outstanding. The absenteeism has dropped near to zero, and monthly production statistics have increased almost 57 per cent compared with the previous months.

After extensive interviewing of participated workers, the following statements were summaries of their opinion.

1. Provides a variety of tasks; gives freshness in the everyday jobs of library assistants by giving them short performance targets. Perhaps this will be one way of relieving the tedium of many traditional library clerical jobs.
2. Eliminates competition phenomena among fellow workers. No two people will do the same job, thus the worker cannot compare his job with another. Therefore, the worker will feel secure and comfortable in his job.
3. The system was generating incentive to work by giving the feeling of achievement and recognition to those who did work hard. The achievement was reflected in the finished stack of work orders at the end of each day. It is true that there is no need to work hard where there is no feeling of achievement and recognition.

4. The chances of advancement will not depend upon subjective observation of supervisors. The work records are there. They are good for the employees.
5. The variety of jobs will give workers a better chance of professional growth and learning.
6. Minimum supervision was required, because the system coupled jobs and workers together automatically.
7. The library will have a better record for the monthly reports. Because the completed work order records provide good raw data for the compiling of monthly production statistics.
8. This system may generate a reduction in the number of librarians and increase the number of technical assistants and other clerical personnel in some libraries, but this system will release librarians from their non-professional tasks, and will raise the value of librarianship.

RECOMMENDATIONS

The following recommendations were made to the Director of Library Services:

1. Adopt the Library Work Order Processing System in the Technical Service Department, Mercer County Community College Library as a standard work procedure.
2. For better utilization of the system, upgrade job titles from clerk-typist and keypunch operator to Library Assistant, Technical Service Librarian to Assistant Director in Technical Service.
3. Library Assistant's pay scale should be above B of present scale.
4. A full-time keypunch operator is not needed. Simply, he does not have enough keypunch jobs. His title should be changed to Library Assistant so that he could do some other technical processing work.
5. If Library Assistant must have a job description, write it with broad and general terminology.
6. To make the library a more academic and democratic place, each librarian should be rotated on different assignments every year, and director every two years, either by appointment or election.

BIBLIOGRAPHY

"Boredom on the Assembly Line: Factories Contend with a New Industrial Revolution," Life, September 1, 1972, pp. 30-38

Chase, Stuart, Men and Machines, New York: Macmillan Co., 1930

Denz, F. A., Ideas from Employees, New York: Funk & Wagnalls Co., 1948

Drucker, Peter F., The Practice of Management, New York: Harper & Row, 1954

Kim, Choongsik, The Great Confucius, Seoul, Korea: Yangehung Press, 1958

Oberg, Winston, "Make Performance Appraisal Relevant." Harvard Business Review, L (January-February, 1972) pp. 65-67

Rice, James O., Job Enthusiasm and Employee Morale, New York: Funk & Wagnalls Co., 1965

Whikehart, William R., "Let's Stop Turning Workers Into Human Machines," Plain Truth, XXXVII (Nov., 1972) pp. 11-16

Wilcox, William S., "Can Suggestion Systems Pay for Themselves?" Management Record, XIV (March, 1952), pp. 85-87